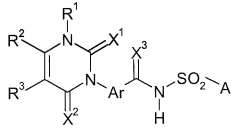
CLAIMS:

1. (Currently amended) A process for preparing a compound of formula I



I,

where the variables are each defined as follows:

R^1 is hydrogen, cyano, amino, C_1-C_6-alkyl, C_1-C_3-cyanoalkyl, C_1-C_6-haloalkyl, C_1-C_6-haloalkoxy, C_3-C_7-cycloalkyl, C_2-C_6-alkenyl, C_2-C_6-haloalkenyl, C_3-C_6-alkynyl, C_3-C_6-haloalkynyl or phenyl-C_1-C_4-alkyl;

R^2 and R^3 are each independently hydrogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_3-C_7-cycloalkyl, C_2-C_6-alkenyl, C_2-C_6-haloalkenyl, C_3-C_6-alkynyl or C_3-C_6-haloalkynyl;

X^1, X^2 and X^3 are each independently oxygen or sulfur;

Ar is phenyl, which may be mono- or polysubstituted by the following groups: hydrogen, halogen, cyano, C_1-C_4-alkyl or C_1-C_4-haloalkyl; and

A is $-NR^5R^6$ where the variables R^5 and R^6 ~~are each defined as follows: R^5 and R^6~~ are each independently

hydrogen, C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl or C_2-C_{10}-alkynyl, each of which may be unsubstituted or substituted by one of the following radicals:

C_1-C_4-alkoxy, C_1-C_4-alkylthio, CN, NO_2, formyl, C_1-C_4-alkylcarbonyl, C_1-C_4-alkoxycarbonyl, C_1-C_4-alkylaminocarbonyl, C_1-C_4-dialkylaminocarbonyl, C_1-C_4-alkylsulfinyl, C_1-C_4-alkylsulfonyl, C_3-C_{10}-cycloalkyl, 3- to 8-membered heterocyclyl having from one to three heteroatoms selected from O, S, N and an NR^7 group where R^7 is hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl[[,]];

or

~~phenyl which may itself have 1, 2, 3 or 4 substituents selected from halogen, C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-fluoroalkyl, C_1-C_4-alkyloxycarbonyl, trifluoromethylsulfonyl, C_1-C_3-alkylamino, C_1-C_3-dialkylamino, formyl, nitro or cyano;~~

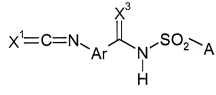
C_1-C_{10}-haloalkyl, C_2-C_{10}-haloalkenyl[[,]] or C_2-C_{10}-haloalkynyl, ~~C_3-C_8-cycloalkyl, C_3-C_{10}-cycloalkenyl, 3- to 8-membered heterocyclyl having from one to three heteroatoms selected from O, S, N and an NR^7 group where R^7 is hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl,~~

~~phenyl or naphthyl, where C_3-C_8-cycloalkyl, C_3-C_{10}-cycloalkenyl, 3- to 8-membered heterocyclyl, phenyl or naphthyl, each may themselves have 1, 2, 3 or 4 substituents selected from halogen, C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-fluoroalkyl,~~

~~C_1-C_4-alkyloxycarbonyl, trifluoromethylsulfonyl, formyl, C_1-C_3-alkylamino, C_1-C_3-dialkylamino, phenoxy, nitro or cyano; or~~

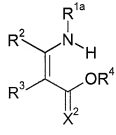
~~R^5 and R^6 together form a saturated or partially unsaturated 5- to 8-membered nitrogen heterocycle which may have, as ring members, one or two carbonyl groups, thiocarbonyl groups and/or one or two further heteroatoms selected from O, S, N and an NR^7 group where R^7 is hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl, and which may be substituted by C_1-C_4-alkyl, C_1-C_4-alkoxy and/or C_1-C_4-haloalkyl;~~

comprising reacting a phenyl iso(thio)cyanate of the formula II



II,

where the variables X^1, X^3, Ar and A are each as defined above, with an enamine of the general formula III



III,

where

R^{1a} is as defined above for R^1 with the exception of amino;

R^2, R^3 and X^2 are each as defined above; and

R^4 is C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_3-alkoxy-C_1-C_3-alkyl, C_1-C_3-alkylthio-C_1-C_3-alkyl, C_2-C_6-alkenyl, C_2-C_6-haloalkenyl, C_3-C_6-alkynyl, C_3-C_6-haloalkynyl, C_3-C_7-cycloalkyl, C_1-C_6-cyanoalkyl or benzyl which is itself unsubstituted or substituted on the phenyl ring by methyl, methoxy, methylthio, halogen, nitro or cyano;

in the presence of from 1.8 to 2.6 base equivalents per mole of the phenyl iso(thio)cyanate of the formula II;

and, if appropriate, in a further step, reacting the resulting 3-phenyl(thio)uracil or 3-phenyldithiouracil of the formula I where R^1=R^{1a}, where R^1 is hydrogen, with an aminating agent of the formula IV

$$H_2N—L^1 \quad IV,$$

where L^1 is a nucleophilic leaving group

to give a 3-phenyl(thio)uracil or 3-phenyldithiouracil of the formula I where R^1 = amino.

2. (Original) The process according to claim 1, wherein the reaction is effected in the presence of a base which is selected from alkali metal and alkaline earth metal carbonates, alkali metal and alkaline earth metal alkoxides, alkali metal and alkaline earth metal hydrides and tertiary amines.

3. (Previously presented) The process according to claim 1, wherein the reaction is effected in a solvent comprising at least one aprotic polar solvent, and the aprotic polar solvent has a water content of from 0 to 0.5% by weight, based on the total amount of compound II, compound III and solvent.

4. (Original) The process according to claim 3, wherein the solvent comprises at least 50% by volume of an aprotic polar solvent selected from carboxamides, carboxylic esters, carbonates, nitriles and sulfoxides.

5. (Original) The process according to claim 4, wherein the solvent comprises at least 80% by weight of an aprotic polar solvent.

6. (Previously presented) The process according to claim 1, wherein from 0.9 to 1.3 mol of the enamine of the formula III are used per mole of the compound II.

7. (Previously presented) The process according to claim 1, wherein a 3-phenyl-(thio)uracil or a 3-phenyldithiouracil, where R^1 is hydrogen, is prepared and this compound I is subsequently

(A) reacted with an aminating agent of the formula IV

$$H_2N\text{-}L^1 \qquad IV$$

where L^1 is a nucleophilically displaceable leaving group to obtain a compound of the formula I where

R^1 is amino; and

the variables R^2, R^3, X^1, X^2, X^3, Ar and A are each as defined above;

or

(B) reacted with an alkylating agent of the formula V

$$R^{1b}\text{-}L^2 \qquad V$$

where

R^{1b} is C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_3-C_7-cycloalkyl, C_2-C_6-alkenyl, C_2-C_6-haloalkenyl, C_3-C_6-alkynyl or C_3-C_6-haloalkynyl; and

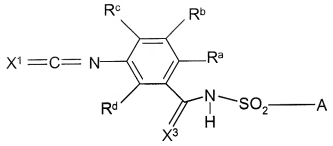
L^2 is a nucleophilically displaceable leaving group;

to obtain a compound of the general formula I where

R^1 is as defined for R^{1b}; and

the variables R^2, R^3, X^1, X^2, X^3, Ar and A are each as defined above.

8. (Previously presented) The process according to claim 1, wherein the phenyl iso(thio)cyanate of the formula II is described by the formula IIA



IIA,

where

X^1, X^3 and A are each as defined above and

R^a, R^b, R^c and R^d are each independently

hydrogen, halogen, cyano, C_1-C_4-alkyl or C_1-C_4-haloalkyl.

9. (Original) The process according to claim 8, wherein, in formula IIA,

R^a is halogen, cyano or trifluoromethyl;

R^c is hydrogen or halogen; and

R^b and R^d are each hydrogen.

10. (Canceled)

11. (Currently amended) The process according to claim 1, wherein R^5 and R^6 ~~are each defined as follows: R^5 and R^6~~ are each independently

hydrogen, C_1-C_6-alkyl which ~~may if appropriate carry~~ optionally carries a substituent selected from the group consisting of halogen, cyano, C_1-C_4-alkoxy, C_1-C_4-alkoxycarbonyl, C_1-C_4-alkylthio, C_3-C_8-cycloalkyl, furyl, thienyl, 1,3-dioxolanyl and phenyl, which ~~may~~ itself optionally ~~be substituted by~~ carries a substituent selected from the group consisting of halogen [[or]] and C_1-C_4-alkoxy;

or

C_2-C_6-alkenyl[[,]] or C_2-C_6-alkynyl~~, C_3-C_8-cycloalkyl or phenyl~~ which ~~may if appropriate carry~~ optionally carries 1 or 2 substituents selected from the group consisting of halogen, C_1-C_4-alkyl, C_1-C_4-fluoroalkyl, C_1-C_4-alkoxy, C_1-C_4-alkoxycarbonyl, nitro and C_1-C_3-dialkylamino~~;~~

~~naphthyl or pyridyl; or~~

~~R^5 and R^6 together form a five-, six- or seven-membered saturated or unsaturated nitrogen heterocycle which may contain, as a ring member, one further heteroatom selected from N, O and an NR^7 group~~

~~where R^7 is hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl or C_3-C_6-alkynyl, and/or may be substituted by one, two or three substituents selected from C_1-C_4-alkyl and C_1-C_4-haloalkyl.~~

12. (Previously presented) The process according to claim 1, wherein X^1, X^2 and X^3 are each oxygen.

13. (Previously presented) The process according to claim 1, wherein R^1 is hydrogen, amino or C_1-C_4-alkyl.

14. (Previously presented) The process according to claim 1, wherein R^2 is hydrogen, C_1-C_4-alkyl or C_1-C_4-haloalkyl.

15. (Previously presented) The process according to claim 1, wherein R^3 is hydrogen.

16. (Canceled)

17. (Previously presented) A process of claim 1, wherein R^1 is hydrogen, further comprising reacting said compound of Formula I wherein R1 is hydrogen with an alkylating agent of Formula V

$$R^{1b} - L^2 \qquad V,$$

wherein L^2 is a nucleophilically displaceable leaving group and

wherein R^{1b} is C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_3-C_7-cycloalkyl, C_2-C_6-alkenyl, C_2-C_6-haloalkenyl, C_3-C_6-alkynyl or C_3-C_6-haloalkynyl.